

## AMENDMENTS TO THE SPECIFICATION

Please replace the third full paragraph on page 6 with the following amended paragraph:

In figure 2, there is shown a strip line implementation of the arrangement marked 100. The input of the arrangement 100 is provided at 118 at the one end of the first line 114. First strip line 114 is a  $50\ \Omega$  line terminated by a  $50\ \Omega$  resistor 121 at the other end thereof. A second strip line 116, which is a  $10\ \Omega$  line, extends parallel to the first line and is spaced about 5 mm from the first line. The second line 116 is connected at an output 119 to an output amplifier 123 ~~[[112]]~~. The output amplifier ~~[[121]]~~ 123 is connected in a conventional way to a  $50\ \Omega$  output strip line 127. The line 116 is terminated at its one end by a resistor 122.

Please replace the first full paragraph on page 7 with the following amended paragraph:

The amplifiers 120.1 to 120.4 comprise common source FET's and are interspaced by a distance  $l$  equal to 7.5 cm. The propagation speed of the signal through the strip lines is  $c/2$  where  $c$  is equal to the speed of light. Hence, the spacing  $l$  corresponds to a full width half maximum (FWHM) value of 0.5 ns for an input pulse  $S_i(t)$ .

Please replace the second full paragraph on page 7 with the following amended paragraph:

In figure 5, there is shown a graph of the output signal  $S_o(t)$  in the form of relative signal energy marked 50 and relative RMS signal voltage marked 52 against the ratio of full width half maximum (FWHM) of the input pulse and spacing  $l$  between paths. With the ratio equal to one, that is with the aforementioned spacing of 7.5 cm and a pulse with FWHM = 0.5 ns, about 75% (see numeral 56 on the graph) of the summed signal propagates toward output 119. A graph of output noise is also shown at 54 and it is clear that less than 50% of noise generated propagates toward 119.

Please replace the third full paragraph on page 7 with the following amended paragraph:

It will also be seen from figure 5 that signal loses for short pulses, that is pulses substantially shorter than the spacing  $l$  is lower than for larger pulses.